

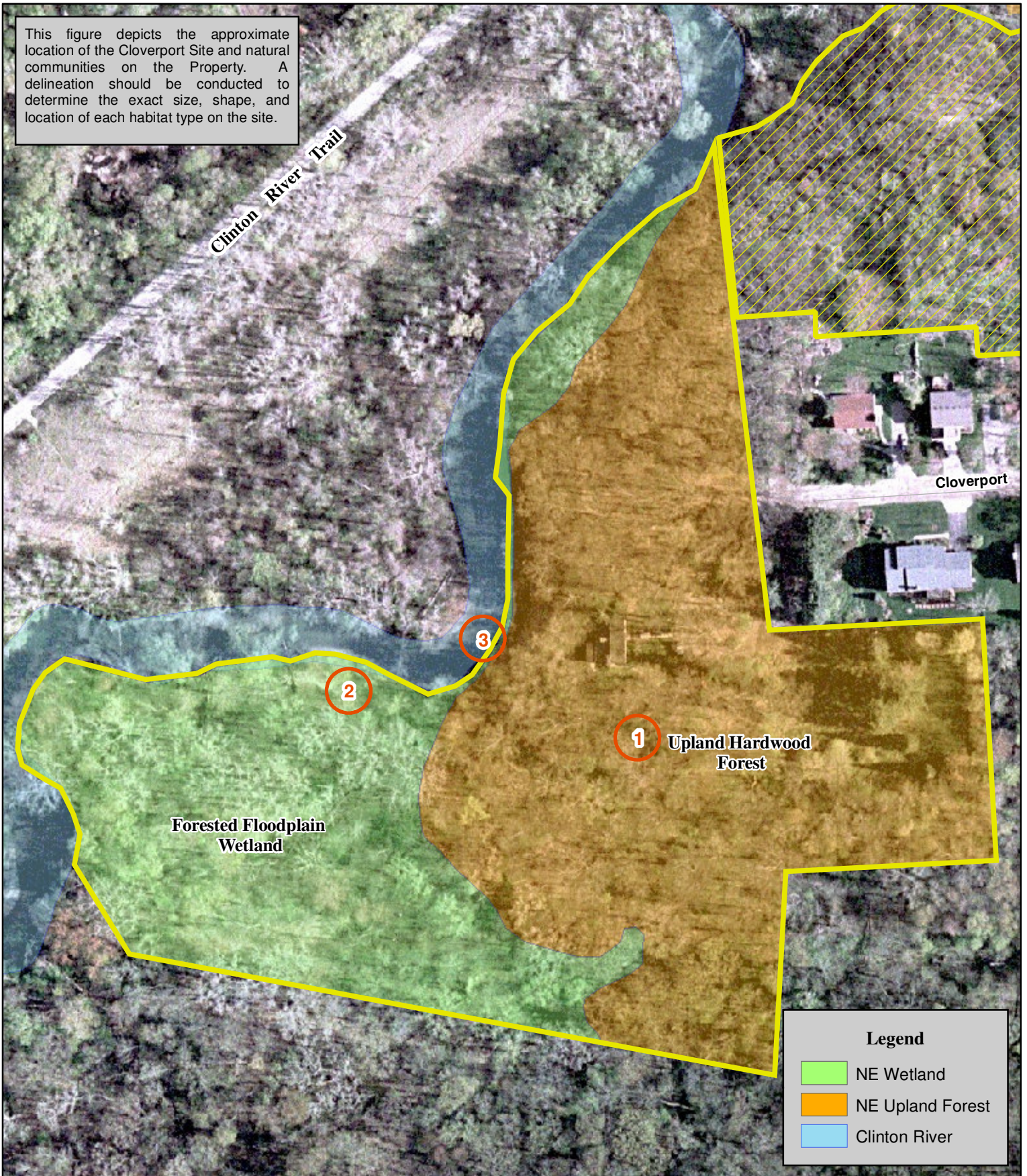


**NISWANDER ENVIRONMENTAL, LLC**  
*Finding Solutions in a Complex World*

## **APPENDIX D**

### **CLOVERPORT PROPERTY**

This figure depicts the approximate location of the Cloverport Site and natural communities on the Property. A delineation should be conducted to determine the exact size, shape, and location of each habitat type on the site.



**Figure 6. Natural Features Map - Cloverport Site**

NE 1210 Rochester Hills Greenspace Inventory  
7.42-acre Cloverport Property  
Section 15 of Rochester Hills, Oakland, Co., MI  
Source: MiGDL, City of Rochester Hills GIS Dept.  
Habitat Assessment: May 6, May 17, and June 16, 2010  
Map Created: June 21, 2010

# NE 1210 Rochester Hills Greenspace Assessment and FQA

Site: Cloverport

Habitat Type: Overall

Sampling Dates: May 6, 2010 May 17, 2010 June 16, 2010

Total Species - 110

Mean C Value - 2.59

FQI Score - 27.16

Native - 78 (71%)

Adventive - 32 (29%)

Habitat  
UF - Upland Forest  
W - Wetland

Species	Common Name	C Value	Wetness (status)	Habitat
<i>Abies balsamea</i>	balsam fir	3	-3 (FACW)	UF
<i>Acer negundo</i>	box elder	0	-2 (FACW-)	UF, W
<i>Acer nigrum</i>	black maple	4	3 (FACU)	UF
<i>Acer rubrum</i>	red maple	1	0 (FAC)	UF, W
<i>Acer saccharinum</i>	silver maple	2	-3 (FACW)	UF, W
<i>Acer saccharum</i>	sugar maple	5	3 (FACU)	UF
<i>Actaea pachypoda</i>	doll's-eyes	7	5 (UPL)	UF
<i>Agrimonia gryposepala</i>	tall agrimony	2	2 (FACU+)	UF
<i>Agrimonia parviflora</i>	swamp agrimony	4	-1 (FAC+)	W
<i>Alliaria petiolata</i>	garlic mustard	*	0 (FAC)	UF, W
<i>Anemone canadensis</i>	Canada anemone	4	-3 (FACW)	UF, W
<i>Anemone quinquefolia</i>	wood anemone	5	0 (FAC)	UF
<i>Arctium lappa</i>	great burdock	*	2 (FACU+)	UF
<i>Arisaema triphyllum</i>	jack-in-the-pulpit	5	-2 (FACW-)	UF, W
<i>Aster lanceolatus</i>	Eastern lined aster	2	-3 (FACW)	W
<i>Barbarea vulgaris</i>	winter cress	*	0 (FAC)	UF, W
<i>Berberis thunbergii</i>	barberry	*	4 (FACU-)	UF
<i>Betula papyrifera</i>	white birch	2	2 (FACU+)	UF
<i>Bromus ciliatus</i>	fringed brome	6	-3 (FACW)	UF, W
<i>Calamagrostis canadensis</i>	blue joint grass	3	-5 (OBL)	W
<i>Carex bebbii</i>	Bebb's oval sedge	4	-5 (OBL)	W
<i>Carex lacustris</i>	lakebank sedge	6	-5 (OBL)	W
<i>Carex leptoneuriva</i>	nerveless woodland sedge	3	0 (FAC)	UF
<i>Carex pennsylvanica</i>	Pennsylvania sedge	4	5 (UPL)	UF
<i>Carex vulpinoidea</i>	fox sedge	1	-5 (OBL)	W
<i>Carpinus caroliniana</i>	musclewood	6	0 (FAC)	UF
<i>Carya ovata</i>	shagbark hickory	5	3 (FACU)	UF
<i>Celastrus orbiculatus</i>	Oriental bittersweet	*	5 (UPL)	UF
<i>Cirsium arvense</i>	Canada thistle	*	3 (FACU)	UF
<i>Cirsium vulgare</i>	bull thistle	*	2 (FACU-)	UF
<i>Convallaria majalis</i>	lily-of-the-valley	*	5 (UPL)	UF
<i>Cornus amomum</i>	silky dogwood	2	-4 (FACW+)	UF, W
<i>Cornus foemina</i>	gray dogwood	1	-2 (FACW-)	UF, W
<i>Dactylis glomerata</i>	orchard grass	*	3 (FACU)	UF
<i>Daucus carota</i>	Queen-Anne's lace	*	5 (UPL)	UF
<i>Dryopteris intermedia</i>	evergreen woodfern	5	0 (FAC)	W
<i>Elaeagnus umbellata</i>	autumn olive	*	3 (FACU)	UF
<i>Eleocharis obtusa</i>	spikerush	3	-5 (OBL)	W
<i>Equisetum fluviatile</i>	water horsetail	7	-5 (OBL)	W
<i>Equisetum palustre</i>	marsh horsetail	10	-3 (FACW)	UF, W

# NE 1210 Rochester Hills Greenspace Assessment and FQA

Site: Cloverport

Habitat

UF - Upland Forest

W - Wetland

Species	Common Name	C Value	Wetness (status)	Habitat
<i>Erigeron annuus</i>	daisy fleabane	0	1 (FAC-)	UF
<i>Erythronium americanum</i>	trout lily	5	5 (UPL)	UF
<i>Euonymus alata</i>	winged burning bush	*	5 (UPL)	UF
<i>Fraxinus pennsylvanica</i>	green ash	2	-3 (FACW)	UF, W
<i>Galium aparine</i>	annual bedstraw	0	3 (FACU)	UF
<i>Geranium maculatum</i>	wild geranium	4	3 (FACU)	UF
<i>Geum aleppicum</i>	yellow avens	3	-1 (FAC+)	UF, W
<i>Geum canadense</i>	white avens	1	0 (FAC)	UF
<i>Glechoma hederacea</i>	ground ivy	*	3 (FACU)	UF
<i>Glyceria striata</i>	fowl manna grass	4	-5 (OBL)	W
<i>Hamamelis virginiana</i>	witch hazel	5	3 (FACU)	UF
<i>Hesperis matronalis</i>	dame's rocket	*	5 (UPL)	UF
<i>Impatiens capensis</i>	jewelweed	2	-3 (FACW)	W
<i>Juglans nigra</i>	black walnut	5	3 (FACU)	UF
<i>Juniperus virginiana</i>	red cedar	3	3 (FACU)	UF
<i>Leonurus cardiaca</i>	motherwort	*	5 (UPL)	UF
<i>Ligustrum vulgare</i>	common privet	*	1 (FAC-)	UF
<i>Lonicera tartarica</i>	tartarian honeysuckle	*	3 (FACU)	UF, W
<i>Lycopodium clavatum</i>	club moss	4	0 (FAC)	UF
<i>Lysimachia nummularia</i>	moneywort	*	-4 (FACW+)	W
<i>Lythrum salicaria</i>	purple loosestrife	*	-5 (OBL)	W
<i>Malus coronaria</i>	crab apple	4	5 (UPL)	UF
<i>Myosotis scorpioides</i>	forget-me-not	*	-5 (OBL)	W
<i>Ostrya virginiana</i>	hop hornbeam	5	4 (FACU-)	UF
<i>Pachysandra terminalis</i>	pachysandra	*	5 (UPL)	UF
<i>Parthenocissus quinquefolia</i>	Virginia creeper	5	1 (FAC-)	UF
<i>Phlox divaricata</i>	woodland phlox	5	3 (FACU)	UF
<i>Phragmites australis</i>	common reed	0	-4 (FACW+)	W
<i>Physocarpus opulifolius</i>	ninebark	4	-2 (FACW-)	W
<i>Picea abies</i>	norway spruce	*	5 (UPL)	UF
<i>Pinus strobus</i>	white pine	3	3 (FACU)	UF
<i>Poa pratensis</i>	Kentucky bluegrass	*	-1 (FAC+)	UF, W
<i>Podophyllum peltatum</i>	may apple	3	3 (FACU)	UF
<i>Polygonum virginianum</i>	Virginia knotweed	4	0 (FAC)	UF
<i>Populus deltoides</i>	Eastern cottonwood	1	-1 (FAC+)	UF, W
<i>Prunus pensylvanica</i>	pin cherry	3	4 (FACU-)	UF
<i>Prunus serotina</i>	black cherry	2	3 (FACU)	UF
<i>Quercus alba</i>	white oak	5	3 (FACU)	UF
<i>Quercus rubra</i>	red oak	5	3 (FACU)	UF
<i>Quercus velutina</i>	black oak	6	5 (UPL)	UF
<i>Ranunculus acris</i>	common buttercup	*	-2 (FACW-)	W
<i>Rhamnus cathartica</i>	common buckthorn	*	3 (FACU)	UF
<i>Rhamnus frangula</i>	glossy buckthorn	*	-1 (FAC+)	UF, W
<i>Ribes triste</i>	swamp red currant	6	-5 (OBL)	W
<i>Rosa multiflora</i>	multiflora rose	*	3 (FACU)	UF
<i>Rubus allegheniensis</i>	common blackberry	1	2 (FACU+)	UF
<i>Rubus occidentalis</i>	black raspberry	1	5 (UPL)	UF
<i>Rumex crispus</i>	curly dock	*	-1 (FAC+)	UF
<i>Rumex verticillatus</i>	water dock	7	-5 (OBL)	W

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Site: Cloverport

Habitat

UF - Upland Forest

W - Wetland

Species	Common Name	C Value	Wetness (status)	Habitat
<i>Salix exigua</i>	sandbar willow	1	-5 (OBL)	W
<i>Salix nigra</i>	black willow	5	-5 (OBL)	W
<i>Sanguinaria canadensis</i>	bloodroot	5	4 (FACU-)	UF
<i>Silene vulgaris</i>	bladder campion	*	5 (UPL)	UF
<i>Smilacina stellata</i>	starry false solomon's-seal	5	1 (FAC-)	UF
<i>Solidago gigantea</i>	late goldenrod	3	-3 (FACW)	UF, W
<i>Syringa vulgaris</i>	common lilac	*	5 (UPL)	UF
<i>Taraxacum officinale</i>	dandelion	*	3 (FACU)	UF
<i>Thalictrum dioicum</i>	early meadow rue	6	2 (FACU+)	UF
<i>Tilia americana</i>	basswood	5	3 (FACU)	UF
<i>Toxicodendron radicans</i>	poison ivy	2	-1 (FAC+)	UF, W
<i>Trillium grandiflorum</i>	common trillium	5	5 (UPL)	UF
<i>Ulmus americana</i>	American elm	1	-2 (FACW-)	UF, W
<i>Ulmus rubra</i>	slippery elm	2	0 (FAC)	UF
<i>Urtica dioica</i>	stinging nettle	1	-1 (FAC+)	W
<i>Verbena hastata</i>	blue vervain	4	-4 (FACW+)	W
<i>Viburnum opulus americanum</i>	highbush cranberry	5	-3 (FACW)	W
<i>Vinca minor</i>	periwinkle	*	5 (UPL)	UF
<i>Viola cucullata</i>	marsh violet	5	-5 (OBL)	W
<i>Viola pubescens</i>	yellow violet	4	4 (FACU-)	UF
<i>Vitis aestivalis</i>	summer grape	6	3 (FACU)	UF

### Photographic Log



**Photo 1**

The Cloverport Property is primarily wooded.



**Photo 2**

The Property features a diverse forested community dominated by upland hardwood trees.

### Photographic Log



**Photo 3**  
Upland hardwood forest.



**Photo 4**  
Top of ridge leading down to the Clinton River.

### Photographic Log



**Photo 5**

Non-native groundcovers such as periwinkle (above) are abundant near the site of a former home.



**Photo 6**

Large stands of invasive groundcovers threaten the native woodland species.



**Photographic Log****Photo 7**

Spring wildflowers carpeted portions of the upland hardwood forest.

**Photo 8**

Common trillium at the Cloverport Property.

**Photographic Log**



**Photo 9**

Significant amounts of silt are present within the floodplain wetland.



**Photo 10**

Silt deposits have been traced to an upslope, off-site source.

### Photographic Log



**Photo 11**

Severe bank erosion along the southern bank of the Clinton River.



**Photo 12**

Management efforts are needed to restore the eroded banks of the river.